



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/688,350	10/16/2000	Tatsuki Kouwa	Q61020	9796

7590 08/09/2002

Sughrue Mion Zinn  
MacPeak & Seas PLLC  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3213

EXAMINER
----------

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 08/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/688,350

Applicant(s)

KOUWA ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 2 and 4, a resistor for limiting current is disposed between an element and the input terminal. What is considered "an element" within the control apparatus? Any element? There are many elements in the control apparatus.

In claim 3, the light emitting element is couple through an ignition switch to the base of a transistor. What is connected to the transistor, the switch or the light emitting element?

In claim 5, what is meant by maintaining the output of one phase of the vehicle generator?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishita in view of Beyn.

Morishita discloses voltage control apparatus for a vehicle having an input terminal, a battery 4, a switch 5, a light emitting element 6, a rotor coil 102, a resistor between an element and the light emitting element 6 (see figure 1). Also, it is disclosed that light emitting element is couple to the base of a transistor 302, 318.

However, Morishita does not disclose explicitly that the resistor decreases the current.

On the other hand, Beyn discloses for the purpose of providing desirable safe operating conditions for alternator systems, a battery 24, a switch 42, a light emitting diode 46 connected to a current limiting resistor 60 (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a voltage control apparatus as disclosed by Morishita and to modify the invention by explicitly disclosing a current limiting resistor with an LED discloses for the purpose of providing desirable safe operating conditions for alternator systems as disclosed by Beyn.

5. Claims 4, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morishita in view of Beyn and Mashino.

Morishita discloses voltage control apparatus for a vehicle having an input terminal, a battery 4, a switch 5, a light emitting element 6, a rotor coil 102, a resistor between an element and the light emitting element 6 (see figure 1). Also, it is disclosed that light emitting element is couple to the base of a transistor 302, 318.

However, Morishita does not disclose explicitly that the resistor decreases the current.

On the other hand, Beyn discloses for the purpose of providing desirable safe operating conditions for alternator systems, a battery 24, a switch 42, a light emitting diode 46 connected to a current limiting resistor 60 (see figure 1).

However, neither Morishita nor Beyn disclose explicitly having a voltage detector circuit.

On the other hand, Mashino discloses for the purpose of providing an inexpensive way of controlling the voltage of a generator and reduce fluctuation of the characteristics of the magnetic circuit of generators, a circuit for detecting the voltage of a control apparatus (see abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a voltage control apparatus as disclosed by Morishita and to modify the invention by explicitly disclosing a current limiting resistor with an LED discloses for the purpose of providing desirable safe operating conditions for alternator systems as disclosed by Beyn and to use a voltage detection circuit for the purpose of providing an inexpensive way of controlling the voltage of a generator and reduce fluctuation of the characteristics of the magnetic circuit of generators as disclosed by Mashino.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

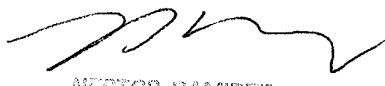
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

August 6, 2002

  
NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800